

**Before the
Federal Communications Commission
Washington, D.C. 20554**

In the Matter of)	
)	
Connect America Fund)	WC Docket No. 10-90
)	
ETC Annual Reports and Certifications)	WC Docket No. 14-58
)	
Rural Broadband Experiments)	WC Docket No. 14-259
)	

**REPLY COMMENTS OF
THE UNITED STATES TELECOM ASSOCIATION**

The United States Telecom Association (USTelecom) submits these reply comments in response to the Further Notice of Proposed Rulemaking (“NPRM” or “Notice”) issued by the Federal Communications Commission (Commission) proposing procedures for the competitive bidding process to be used during the Connect America Fund (CAF) Phase II auction.¹ Among other issues, the Commission in its Notice seeks comment on how to apply weights to the different performance tiers adopted in its Order.

The record demonstrates strong support for adoption of an auction weighting approach consistent with the one proposed by USTelecom. USTelecom’s proposal prioritized cost-effectiveness, faster speeds, higher usage allowances and lower latency consistent with the Communications Act’s requirement that USF support be directed towards reasonably comparable services that have “been subscribed to by a substantial majority of residential customers.”² In addition, USTelecom’s proposal results in CAF Phase II support being directed towards subsidizing broadband networks that support real-time services, such as voice communications (including voice

¹ Report and Order and Further Notice of Proposed Rulemaking, *Connect America Fund*, 81 FR 44414, 31 FCC Rcd. 5949, FCC 16-64 (released May 26, 2016) (*CAF II Auction NPRM*).

² 47 U.S.C. 254(c)(1)(B).

over internet protocol (VoIP)), virtual private networks (VPNs), and other time- and data-sensitive services. These services are crucial to enabling telework and home-based businesses in rural areas.

As noted by USTelecom and others, appropriate weighting of bids is essential to achieving the Commission’s “overarching goal of providing households in the relevant high-cost areas with access to high quality broadband services, while making the most efficient use of finite universal service funds.”³ USTelecom therefore proposed that the Commission assign the following weights to its four performance tiers:

Performance Tier	Speed	Usage Allowance	Scoring Criteria
Minimum	10/1 Mbps	≥ 150 GB	0 Points
Baseline	25/3 Mbps	≥ 150 GB or U.S. median, whichever is higher.	10 Points
Above Baseline	100/20 Mbps	Unlimited	20 Points
Gigabit	Gig/500 Mbps	Unlimited	25 Points

Moreover, given the importance of voice service and telework solutions to overall universal service reform efforts, USTelecom emphasized the need for the Commission to acknowledge the lack of comparability between services offered over high- and low-latency platforms. Accordingly, USTelecom proposed the following weighting for the Commission’s latency categories:

³ See, *CAF II Auction NPRM*, ¶ 207.

FCC Latency Characterization	Latency Level	Auction Weighting
Low Latency	≤ 100 ms	0 points
High Latency	≤ 750 ms & MOS of ≥ 4	-75 points

Consistent with the Commission’s guidance, several commenters supported precisely this approach. For example, the Wireless Internet Service Providers Association (WISPA) recommends a weighting proposal identical to the one proposed by USTelecom. Similar to USTelecom’s proposal, WISPA’s proposal emphasized the Commission’s criteria of speed, latency and data allowance, and rewards bidders exceeding the proposed benchmarks.⁴ WISPA also noted that the Commission should not “over-weight the Minimum Performance or the Gigabit Performance Tiers, neither of which is consistent with the ‘reasonably comparable’ statutory mandate.”⁵

While not identical to the approaches proposed by USTelecom and WISPA, the approach proposed by ITTA similarly establishes bidding credit tiers in five percentage point increments.⁶ Verizon’s proposal is also consistent with the approach taken by both USTelecom and WISPA.⁷

⁴ See, Comments of the Wireless Internet Service Providers Association, WC Docket Nos. 10-90, 14-58 & 14-259, p. 2 (filed July 21, 2016) (*WISPA Comments*).

⁵ *WISPA Comments*, p. 4.

⁶ See Comments of ITTA, WC Docket Nos. 10-90, 14-58 & 14-259, pp. 9 – 10 (filed July 21, 2016) (*ITTA Comments*).

⁷ See Comments of Verizon, WC Docket Nos. 10-90, 14-58 & 14-259, p. 4 (filed July 21, 2016) (stating that “the Commission should set the weight for the baseline tier in the range of 10 percent; the weight for the above-baseline tier 10 percent above the weight for the baseline tier; and the weight for the gigabit tier 5 percent above the weight for the above-baseline tier”) (*Verizon Comments*).

USTelecom’s proposed approach – which recognizes that for a rural consumer, the difference between no Internet and 10 Mbps / 1 Mbps is much, much greater than the difference between 10 Mbps / 1 Mbps and 1 Gbps – is reinforced by the just-released *Twelfth Broadband Progress Notice of Inquiry*.⁸ As the Commission explains, there is no current basis for adopting a speed benchmark faster than 25 Mbps/3 Mbps “[g]iven the continued lack of adoption of fixed broadband services at speeds above [the] current threshold of 25 Mbps/3 Mbps—as well as the ability of consumers to access a range of bandwidth intensive services, such as HD video streaming, using fixed services at speeds of 25 Mbps/3 Mbps.”⁹

In particular, although “only 12 percent of all Americans lacked access to fixed broadband services at speeds of 50 Mbps/5 Mbps, and only 35 percent of all Americans lacked access to fixed broadband at speeds of 100 Mbps/10 Mbps,” only “27 percent of all Americans had adopted fixed services at speeds of 50 Mbps/5 Mbps, and only 14 percent had adopted fixed services at speeds of 100 Mbps/10 Mbps, as of June 30, 2015.”¹⁰ In other words, price-conscious consumers do not see the value of investing their limited resources in speed much higher than they need or can use. Indeed, the Commission recognizes that “download speeds of 25 Mbps allow a household to access a range of bandwidth intensive services, including HD video streaming, simultaneously over multiple devices,” and “services that offer 3 Mbps upload speed continue to support advanced

⁸ See, *Twelfth Broadband Progress Notice of Inquiry, Inquiry Concerning the Deployment of Advanced Telecommunications Capability to All Americans in a Reasonable and Timely Fashion, and Possible Steps to Accelerate Such Deployment Pursuant to Section 706 of the Telecommunications Act of 1996, as Amended by the Broadband Data Improvement Act*, FCC 16-100 (Aug. 4, 2016) (*Broadband NOI*).

⁹ *Id.*, ¶ 14.

¹⁰ *Id.*, ¶¶ 14-15.

broadband services, including HD video calling, virtual private network (VPN) platforms, telemedicine, and distance learning applications.”¹¹

USTelecom continues to believe that the Universal Service Fund should not focus its limited resources on 100 MB or 1 GB. However, if higher speeds are to be included, 100 MB should be sufficient. Given that the Communications Act defines Universal Service as service that has, “through the operation of market choices by customers, been subscribed to by a substantial majority of residential customers,”¹² a 1 Gig service does not meet the statutory requirement for support. Moreover, even in relatively high usage instances that are “well beyond the vast majority of users’ activity,” such needs can be met with speeds of less than 100 megabits.¹³

There was also broad agreement in the record that low latency services are greatly preferable to high latency services, and should be weighted accordingly.¹⁴ Numerous parties acknowledged the importance of real-time applications such as VoIP and VPN solutions allowing telework and home-based businesses. NTCA for example, noted that high-latency services could “significantly hamper or even limit altogether consumers’ ability to utilize real-time applications such as VoIP.”¹⁵ ITTA noted that “from the consumer perspective, latency is a more critical factor in the quality of the user experience than incremental speed differences.”¹⁶

¹¹ *Id.* ¶ 13.

¹² 47 USC § 254(c)(1)(B).

¹³ Jeff Baumgartner, *Who Needs A Gig?*, Multichannel News, August 4, 2016 (available at: <http://www.multichannel.com/blog/bauminator/who-needs-gig/406879>) (visited August 5, 2016).

¹⁴ See e.g., *Verizon Comments*, p. 5; *ITTA Comments*, pp. 10 – 11; Comments of NTCA, WC Docket Nos. 10-90, 14-58 & 14-259, pp. 4 – 6 (filed July 21, 2016) (*NTCA Comments*).

¹⁵ NTCA Comments, p. 6.

¹⁶ *ITTA Comments*, p. 10.

Other commenters similarly emphasized the need to appropriately weight high-latency options, given their significant limitations.¹⁷ For example, Verizon said the Commission should set weights so that high latency bids would be awarded support “only in exceptional circumstances.”¹⁸ Given the broad agreement in the record that high latency performance levels can “substantially impede the consumer’s experience with a variety of applications,” the Commission should reject recommendations that such bids should only be lightly discounted.¹⁹

Again, the Commission’s just-released *NOI* provides further support showing that high-latency broadband products are severely limited and should be weighted accordingly. The Commission recognizes that latency “significantly impacts the performance of interactive, real-time applications, including VoIP, online gaming, videoconferencing, and VPN platforms” and thus “‘plainly affects’ whether consumers have access to advanced telecommunications capability.”²⁰ The Commission notes that “standards developed by the ITU for ‘[r]eal-time, jitter sensitive, high interaction’ applications suggest that an overall ‘mouth-to-ear’ latency of 150 ms or less,” and points to the example of Xbox Live, a popular online gaming platform, which “recommends a latency no greater than 150 ms for use of its service.”²¹ Just as the Commission recognizes the severe limitations of latency in the context of evaluating the deployment of advanced

¹⁷ See, e.g., *Verizon Comments*, p. 5 (“The Commission should assign a significant negative weight to the high-latency option because it fails to meet one of the dimensions of the CAF II offers’ performance standard”); *USTelecom Comments*, pp. 6 – 7; *ITTA Comments*, pp. 10 – 11.

¹⁸ *Verizon Comments*, p. 5.

¹⁹ See Comments of Hughes Network Systems, LLC, WC Docket Nos. 10-90, 14-58 & 14-259, pp. 4 – 5 (filed July 21, 2016); Comments of ViaSat, Inc., WC Docket Nos. 10-90, 14-58 & 14-259, pp. 5 – 6 (filed July 21, 2016).

²⁰ *Broadband NOI*, ¶ 27.

²¹ *Id.* ¶ 31.

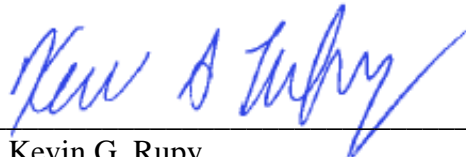
telecommunications capability, so too should it recognize it here in designing weights for the auction.

In light of the comments of USTelecom and others in this proceeding, bids in the upcoming CAF auction should be appropriately weighted to achieve the Commission's "overarching goal of providing households in the relevant high-cost areas with access to high quality broadband services, while making the most efficient use of finite universal service funds."²² The proposal set forth by USTelecom achieves this stated goal, and is broadly supported by other commenters in this proceeding.

Respectfully submitted,

United States Telecom Association

By:

A handwritten signature in blue ink, appearing to read "Kevin G. Rupy", is written over a horizontal line.

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²² See, *CAF II Auction NPRM*, ¶ 207.